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TEXT MINING & INFORMATION RETRIEVAL - TERM PROJECT WINTER 2023

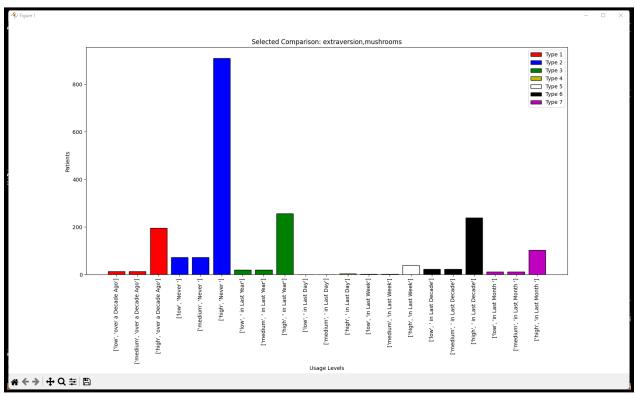
SEARCH IN DRUG CONSUMPTION DATABASE AMONGST SAMPLE POPULATION

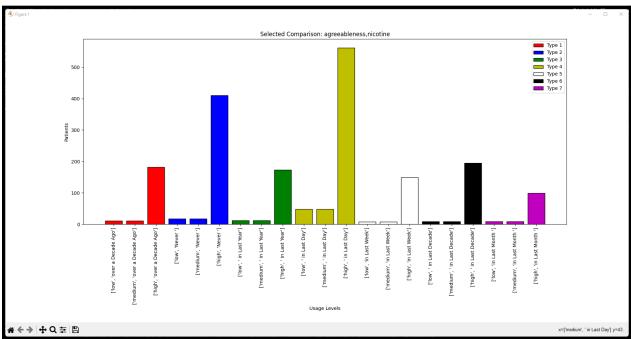
Overview:

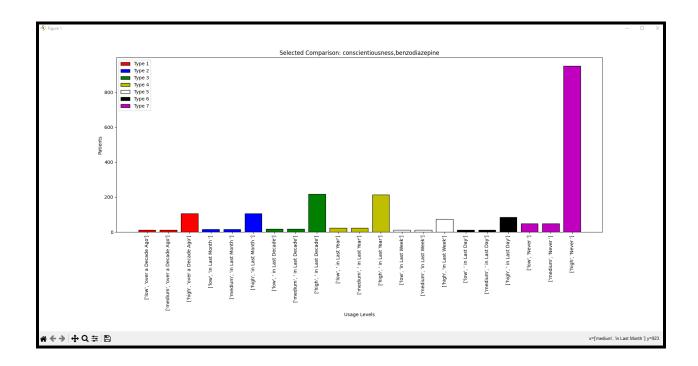
Oftentimes, you hear from reports and psychological studies about how certain drugs can impact the emotional behaviors of individuals. We wanted to create a program that would organize the huge quantity of data on drug usage levels and distill it to verify these claims. We create a quasi-search engine that allows users to compare types of drugs and survey respondent's frequency of use, along with their corresponding NEO-FFI level. Our computation is based on the following separation:

The Big 5 Personality Traits		
	High levels	Low levels
Openness	Extremely creative Trying new things Extremely focused on handling new challenges Thinks about abstract concepts	Doesn't like change Not interested in new things Doesn't welcome new ideas Isn't very imaginative
Conscientiousness	Spends more time preparing Focuses and finishes important tasks on time Pays extra attention to details Likes having a set-out schedule	Doesn't like structures and scheduling Doesn't like to take care of things Fails to complete important or assigned tasks
Extraversion	Loves being the center of attention Conversation starter Enjoys meeting new people Naturally being able to make new friends	Unable to start conversations Doesn't like making small talks Thinks a lot before speaking
Agreeableness	Shows a lot of interest in other people Usually cares about others Feels empathetic towards other people Loves helping	Shows less interest in other people Has low interest in other people's problems Doesn't care about how other people feels
Neuroticism	Gets upset often Dramatic mood swings Feeling anxious	Very emotionally stable Handles stress well Rarely feels upset or depressed

Sample Outputs:







Conclusion:

Our program showed how certain drug usage levels correlate with the shown NEO-FFI characteristics (agreeableness, conscientiousness, extraversion, neuroticism, openness). We believe this program could be of help to researchers and scientists who are looking to learn more about the outcome of a drug on a certain category of neuro levels.

Files required:

- Drug consumption.data
- drugs_inverted.py

Libraries:

• import matplotlib.pyplot as plt

Instructions to reproduce:

- Place .py file and .data file in the same directory in your compiler.
- Run program

- User input requests will show in the terminal
 - o Follow prompts, and a plot of requested data will appear.*
 - Once a plot appears, you may need to adjust the plot size (raising the "bottom" bar) by using the settings sliders in the bottom left corner to read x indices.
 - To see another statistic, exit out of the graph and the beginning prompt will reappear.

^{*}Make sure to spell requested inputs correctly; no catch implemented on misspelling